Bioelectrochemistry and Bioenergetics, 30 (1993) 339
Elsevier Sequoia S.A., Lausanne

Author index

Adolphe, M. 133
Azanza, M.J. 43

Bardasano, J.L. 203
Benamar, B. 133
Berton, R. 13
Beruto, D. 13
Bianco, B. 13, 35
Blank, M. 55
Blott, B.H. 43
Blümel, G. 127
Bobanović, F. 209, 221
Brugere, H. 195
Brun, A. 293, 313

Caorsi, S. 27, 55
Catalá, M.D. 203
Chiabrera, A. 13, 35
Chizhenkova, R.A. 287
Cito, C. 275

Debouck, C. 189
Del Moral, A. 43
Dertinger, H. 143
De Seze, R. 151
Desjobert, H. 133
De Wagter, C. 73
De Zutter, D. 73
Dierickx, M. 65
D'Inzeo, G. 93, 275

Eberhardt, J. 313
Eberhardt, J.L. 293
Edmonds, D.T. 3

Feinendegen, L.E. 111
Fučić, A. 319

Galli, A. 93
Garaj-Vrhovac, V. 319
Giordani, M. 13
Glaser, R. 103
Golouh, R. 209
Gragnani, G.L. 27, 55
Grandolfo, M. 239
Gubina, M. 173
Guillosson, J.J. 133

Hauzeur, J.P. 229
Hinsenkamp, M. 65, 189, 229

Jerčinović, A. 221
Johann, S. 127

Karba, R. 173
Kaufman, J.J. 161
Koren, Z. 333
Kraus, W. 127
Kryžanowski, M. 209

Lambrozo, J. 195
Lederer, T. 127

Maeda, N. 181
Malmgren, L. 73
Markov, M.S. 119
Martens, L. 73
Miklavčič, D. 209
Mikorey, S. 127
Moggia, E. 35
Moreau, J.-M. 151

Nafziger, J. 133
Nasser, P.R. 161
Novakovič, S. 209

Okazaki, M. 181

Palombo, A. 93
Pastorino, M. 27, 55
Peg, M.T. 43
Pershin, S.B. 327
Persson, B.R.R. 73, 293, 313
Pevalek-Kozlina, B. 319
Picazo, M.L. 203
Pilla, A.A. 119, 161
Pupin, F. 195

Rooze, M. 189

Safroshkina, A.A. 287
Salford, L.G. 73, 293, 313
Schimmelpfeng, J. 143
Schneeweiss, F.H.A. 111
Seiyama, A. 181
Serša, G. 209
Sharan, R.N. 111
Shiga, T. 181
Sidorov, V.D. 327
Sintzoff, Jr., S. 229
Soo, L. 55
Szmigielski, S. 253
Szuba, M. 265

Tamburello, C.C. 303
Tarricone, L. 275
Tavernier, A. 65
Tinè, G. 303
Tuffet, S. 151

Van Hese, J. 73
Veyret, B. 151
Vodovnik, L. 173, 209, 221

Wang, S. 119

Xia, F. 111

Zanforlin, L. 303

Bioelectrochemistry and Bioenergetics, 30 (1993) 341–345
Elsevier Sequoia S.A., Lausanne

Subject index

Acetylcholine channels
Ach receptor channel's interaction with MW fields (Tarricone et al.) 275
Alternating magnetic fields
Larmor precession as a mechanism for the detection of static and alternating magnetic fields (Edmonds) 3
cAMP
The action of 50 Hz magnetic and electric fields upon cell proliferation and cyclic AMP content of cultured mammalian cells (Schimmelpfeng, Dertinger) 143
Antibiotic
Effects of direct electric current on the growth of microbes and their susceptibility to antibiotics (Karba et al.) 173

Bacterial growth
Effects of direct electric current on the growth of microbes and their susceptibility to antibiotics (Karba et al.) 173
Barium oxalate
Effect of ELF electromagnetic exposure on precipitation of barium oxalate (Berton et al.) 13
Bioelectromagnetic interaction
Further investigations on non-thermal effects referring to the interaction between ELF fields and transmembrane ionic fluxes (D'Inzeo et al.) 93
Blood–brain barrier
Permeability of the blood–brain barrier induced by 915 MHz electromagnetic radiation, continuous wave and modulated at 8, 16, 50 and 200 Hz (Salford et al.) 293
Brain tumour development
Experimental studies of brain tumour development during exposure to continuous and pulsed 915 MHz radiofrequency radiation (Salford et al.) 313
Breast cancer
Influence of electromagnetic fields on morphology and mitochondrial activity of breast cancer cell line MCF7 (Johann et al.) 127

Cardiac activity
Analysis of the effects of pulsed microwaves on cardiac activity (Tamburello et al.) 303
Cell cycle
The action of 50 Hz magnetic and electric fields upon cell proliferation and cyclic AMP content of cultured mammalian cells (Schimmelpfeng, Dertinger) 143
Cell proliferation
The action of 50 Hz magnetic and electric fields upon cell proliferation and cyclic AMP content of cultured mammalian cells (Schimmelpfeng, Dertinger) 143
Chromosomal aberrations
The rate of elimination of chromosomal aberrations after accidental exposure to microwave radiation (Garaj-Vrhovac et al.) 319
Conductivity
Tensors of dielectric permittivity and conductivity of in vitro human dermis and epidermis (Tavernier et al.) 65
Continuous radiation
Experimental studies of brain tumour development during exposure to continuous and pulsed 915 MHz radiofrequency radiation (Salford et al.) 313
Continuous wave
Permeability of the blood–brain barrier induced by 915 MHz electromagnetic radiation, continuous wave and modulated at 8, 16, 50 and 200 Hz (Salford et al.) 293
Cortical neurons
Effect of low-intensity microwaves on the behaviour of cortical neurons (Chizhenkova, Safroshkina) 287

COST project
New COST project 244: biomedical effects of electromagnetic fields (Koren) 333

Dermis
Tensors of dielectric permittivity and conductivity of in vitro human dermis and epidermis (Tavernier et al.) 65
Dielectric
Tensors of dielectric permittivity and conductivity of in vitro human dermis and epidermis (Tavernier et al.) 65
Dielectric reconstructions
An electromagnetic inverse problem related to the non-invasive reconstruction of dielectric permittivity and electric conductivity in biomedical applications (Caorsi et al.) 55
Direct electric current
Effects of direct electric current on the growth of microbes and their susceptibility to antibiotics (Karba et al.) 173
DNA mutations
DNA mutations and 50 Hz electromagnetic fields (Nafziger et al.) 133

Electromagnetic effects
The Na,K-ATPase as a model for electromagnetic field effects on cells (Blank, Soo) 55
Electromagnetic energy deposition
Electromagnetic energy deposition in living tissues by an overconstrained moment method (Caorsi et al.) 27
Electromagnetic field
Preliminary results in electromagnetic field treatment of osteonecrosis (Hinsenkamp et al.) 229
Electromagnetic field amplitudes
Effect of electromagnetic field amplitudes on quail embryos: preliminary results (Debouck et al.) 189
Electromagnetic fields
Influence of electromagnetic fields on morphology and mitochondrial activity of breast cancer cell line MCF7 (Johann et al.) 127
DNA mutations and 50 Hz electromagnetic fields (Nafziger et al.) 133
The action of 50 Hz magnetic and electric fields upon cell proliferation and cyclic AMP content of cultured mammalian cells (Schimmelpfeng, Dertinger) 143
Experimental studies of brain tumour development during exposure to continuous and pulsed 915 MHz radiofrequency radiation (Salford et al.) 313
New COST project 244: biomedical effects of electromagnetic fields (Koren) 333
Electromagnetic radiation
Permeability of the blood–brain barrier induced by 915 MHz electromagnetic radiation, continuous wave and modulated at 8, 16, 50 and 200 Hz (Salford et al.) 293
Electromechanical coupling
Mechanisms of electromechanical coupling in membranes demonstrated by transmembrane potential-dependent shape transformations of human erythrocytes (Glaser) 103
Electrotherapy
Tumor treatment by direct electric current —tumor temperature and pH, electrode material and configuration (Miklavčič et al.) 209
ELF
The action of 50 Hz magnetic and electric fields upon cell proliferation and cyclic AMP content of cultured mammalian cells (Schimmelpfeng, Dertinger) 143
ELF electromagnetic fields
Effect of ELF electromagnetic exposure on precipitation of barium oxalate (Berton et al.) 13
ELF magnetic fields
Histopathology of the Harderian gland of rodents exposed to ELF magnetic fields (Picazo et al.) 203
Electromagnetic fields and neoplasms with special reference to extremely low frequencies (Szmigielski) 253
Endogenous potentials
Endogenous potentials in two different models of human skin injuries (Jerčinović et al.) 221
Environmental effects
Extremely low frequency electromagnetic fields: environmental exposure levels, epidemiological studies and risk assessment (Grandolfo) 239
Enzyme activity
The Na,K-ATPase as a model for electromagnetic field effects on cells (Blank, Soo) 55

Epidermis
Tensors of dielectric permittivity and conductivity of in vitro human dermis and epidermis (Tavernier et al.) 65
Exposure experiments
Electromagnetic field calculations used for exposure experiments on small animals in TEM-cells (Martens et al.) 73

Fertility
Longitudinal study of reproduction and development in rats exposed to a 50 kV/m, 50 Hz electric field (Brugere et al.) 195
Frequency
Effects of weak low frequency sinusoidal and dc magnetic fields on myosin phosphorylation in a cell-free preparation (Markov et al.) 119

Harderian gland
Histopathology of the Harderian gland of rodents exposed to ELF magnetic fields (Picazo et al.) 203
Human erythrocytes
Mechanisms of electromechanical coupling in membranes demonstrated by transmembrane potential-dependent shape transformations of human erythrocytes (Glaser) 103
Human kidney cells
A strong static magnetic field inhibits the poly-ADP-ribosylation of proteins in human kidney T1-cells (Schneeweiss et al.) 111

Immunological effects
Immunomodulating effect of microwaves and ultrahigh frequency electric field in patients with systemic lupus erythematosus (Sidorov, Pershin) 327

Larmor precession
Larmor precession as a mechanism for the detection of static and alternating magnetic fields (Edmonds) 3
Lifetimes
Effect of lifetimes on ligand binding modelled by the density operator (Chiabrera et al.) 35
Ligand binding
Effect of lifetimes on ligand binding modelled by the density operator (Chiabrera et al.) 35

Low-intensity microwaves
Effect of low-intensity microwaves on the behaviour of cortical neurons (Chizhenkova, Safroshkina) 287

Magnetic field
A strong static magnetic field inhibits the poly-ADP-ribosylation of proteins in human kidney T1-cells (Schneeweiss et al.) 111
Magnetic fields
Identification of the magnetic fields generated by welding machines (Szuba) 265
Magnetic susceptibility
Measurement of the red blood cell membrane magnetic susceptibility (Azanza et al.) 43
Microwave fields
Ach receptor channel's interaction with MW fields (Tarricone et al.) 275
Microwave imaging
An electromagnetic inverse problem related to the non-invasive reconstruction of dielectric permittivity and electric conductivity in biomedical applications (Caorsi et al.) 55
Microwave radiation
The rate of elimination of chromosomal aberrations after accidental exposure to microwave radiation (Garaj-Vrhovac et al.) 319
Mitochondrial activity
Influence of electromagnetic fields on morphology and mitochondrial activity of breast cancer cell line MCF7 (Johann et al.) 127
Modulated wave
Permeability of the blood–brain barrier induced by 915 MHz electromagnetic radiation, continuous wave and modulated at 8, 16, 50 and 200 Hz (Salford et al.) 293
Myosin phosphorylation
Effects of weak low frequency sinusoidal and dc magnetic fields on myosin phosphorylation in a cell-free preparation (Markov et al.) 119

Neoplasms
Electromagnetic fields and neoplasms with special reference to extremely low frequencies (Szmigielski) 253

Osteonecrosis
Preliminary results in electromagnetic field treatment of osteonecrosis (Hinsenkamp et al.) 229

Ouabain
The Na,K-ATPase as a model for electromagnetic field effects on cells (Blank, Soo) 55
Overconstrained moment method
Electromagnetic energy deposition in living tissues by an overconstrained moment method (Caorsi et al.) 27

Paramagnetic hemoglobin
Paramagnetic attraction of erythrocyte flow due to an inhomogeneous magnetic field (Shiga et al.) 181
Permittivity
Tensors of dielectric permittivity and conductivity of in vitro human dermis and epidermis (Tavernier et al.) 65
Poly-ADP-ribosylation
A strong static magnetic field inhibits the poly-ADP-ribosylation of proteins in human kidney T1-cells (Schneeweiss et al.) 111
Proteins
A strong static magnetic field inhibits the poly-ADP-ribosylation of proteins in human kidney T1-cells (Schneeweiss et al.) 111
Pulsed magnetic field
Effects of a strong pulsed magnetic field on the proliferation of tumour cells in vitro (Tuffet et al.) 151
Pulsed microwaves
Analysis of the effects of pulsed microwaves on cardiac activity (Tamburello et al.) 303
Pulsed radiation
Experimental studies of brain tumour development during exposure to continuous and pulsed 915 MHz radiofrequency radiation (Salford et al.) 313

Quail embryos
Effect of electromagnetic field amplitudes on quail embryos: preliminary results (Debouck et al.) 189

Red blood cell membranes
Measurement of the red blood cell membrane magnetic susceptibility (Azanza et al.) 43
Reproductive effects
Longitudinal study of reproduction and development in rats exposed to a 50 kV/m, 50 Hz electric field (Brugere et al.) 195

Second messenger
The action of 50 Hz magnetic and electric fields upon cell proliferation and cyclic AMP content of cultured mammalian cells (Schimmelpfeng, Dertinger) 143
Skin injuries
Endogenous potentials in two different models of human skin injuries (Jerčinović et al.) 221
Static magnetic fields
Larmor precession as a mechanism for the detection of static and alternating magnetic fields (Edmonds) 3
Systemic lupus erythematosus
Immunomodulating effect of microwaves and ultrahigh frequency electric field in patients with systemic lupus erythematosus (Sidorov, Pershin) 327

Thermal noise-threshold
On the sensitivity of cells and tissues to therapeutic and environmental electromagnetic fields (Pilla et al.) 161
Tibia lengths
Effect of electromagnetic field amplitudes on quail embryos: preliminary results (Debouck et al.) 189
Tissue sensitivity
On the sensitivity of cells and tissues to therapeutic and environmental electromagnetic fields (Pilla et al.) 161
Transmembrane ionic fluxes
Further investigations on non-thermal effects referring to the interaction between ELF fields and transmembrane ionic fluxes (D'Inzeo et al.) 93
Transverse electromagnetic transmission cells
Electromagnetic field calculations used for exposure experiments on small animals in TEM-cells (Martens et al.) 73
Treatment
Preliminary results in electromagnetic field treatment of osteonecrosis (Hinsenkamp et al.) 229
Tumor treatment
Tumor treatment by direct electric current —tumor temperature and pH, electrode material and configuration (Miklavčič et al.) 209

Tumour cells
Effects of a strong pulsed magnetic field on the proliferation of tumour cells in vitro (Tuffet et al.) 151

UHF electric fields
Immunomodulating effect of microwaves and ultrahigh frequency electric field in patients with systemic lupus erythematosus (Sidorov, Pershin) 327

Welding-process devices
Identification of the magnetic fields generated by welding machines (Szuba) 265

Zeeman model
Effect of lifetimes on ligand binding modelled by the density operator (Chiabrera et al.) 35